

# **Historic, Archive Document**

Do not assume content reflects current  
scientific knowledge, policies, or practices.

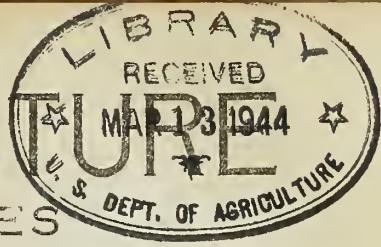


733C1  
SERVE

# COTTON LITERATURE

## SELECTED REFERENCES

PREPARED IN THE LIBRARY OF THE UNITED STATES DEPARTMENT OF AGRICULTURE  
 WITH THE COOPERATION OF THE BUREAU OF AGRICULTURAL ECONOMICS,  
 BUREAU OF PLANT INDUSTRY AND BUREAU OF ENTOMOLOGY.



COMPILED BY EMILY L. DAY, LIBRARY SPECIALIST IN COTTON MARKETING.  
 BUREAU OF AGRICULTURAL ECONOMICS, WASHINGTON, D. C.

Vol. 3

May, 1933

No. 5

### CONTENTS

Production .....	111
General .....	111
Botany .....	112
Agronomy .....	113
Diseases .....	115
Insects .....	116
Farm Engineering .....	116
Farm Management .....	116
Production Credit .....	117
Cooperation in Production .....	117
Preparation .....	117
Ginning .....	117
Baling .....	118
Marketing .....	119
General .....	119
Demand and Competition .....	119
Supply and Movement .....	122
Prices .....	124
Marketing and Handling Methods and Practices .....	124
Services and Facilities .....	124
Cooperation in Marketing .....	125
Utilization .....	125
Fiber, Yarn and Fabric Quality .....	125
Technology of Manufacture .....	134
Technology of Consumption .....	134
Seed and Seed Products .....	135
Legislation, Regulation and Adjudication .....	136
Miscellaneous--General .....	137

COTTON LITERATURE is compiled mainly from material received in the Library of the U. S. Department of Agriculture.

Copies of the publications listed herein can not be supplied by the Department except in the case of publications expressly designated as issued by the U. S. Department of Agriculture. Books, pamphlets, and periodicals mentioned may ordinarily be obtained from their respective publishers or from the Secretary of the issuing organization. Many of them are available for consultation in public or other libraries.

PRODUCTIONGeneral

Harland, S.C. Some notes on Moco cotton in Brazil. Empire Cotton Growing Rev.10(2): 100-107. Apr.1933. (Published by P.S.King and Son,Ltd.,14,Great Smith St., London, S.W.1, England)

Moco, a perennial cotton of Bourbon type, is grown successfully in the Serido district of Brazil.

The cotton zones of the state are described in relation to climate, pests, and diseases. The Moco Experiment Station and its work are described.

India. Central Provinces and Berar. Dept. of agriculture. Report on the Agricultural college, etc., for the year ending the 31st March 1932. 43 p. Nagpur. 1932.

Report of the economic botanist for cotton: p.22-28; also notes in other reports.

India. Madras Presidency. Dept. of agriculture. Reports of subordinate officers for 1929/30. 321 p. Madras. 1930.

Report of cotton specialist: p.211-215.

India. Madras Presidency. Dept. of agriculture. Reports of subordinate officers for 1930/31. 162 p. Madras. 1931.

Report of cotton specialist: p.116-121.

Indian science congress. Proceedings of the nineteenth... Bangalore, 1932 (Third circuit) 539 p., illus. Calcutta, Asiatic society of Bengal, 1932.

Notes or abstracts are given of the following papers: The response of cotton and barley to x-ray, violet-ray, ultra-violet-ray and radiomagnetic treatment, by S.S. Nehru, p.70.- Effect of the contact of chemical fertilisers with seeds on their germination, by V. G. Gokhale and P.M.Gaywala, p.70.- Growing of gaorani Bani cotton in Hyderabad state, by K.Sawhney and D.V. Narayanayya, p.74.- A preliminary note on the effect of sowing date on growth, flowering and yield on Bani (G.indicum, Lamk.) plant, by K.Sawhney and B. B. Mulchandani, p.75.- A note on the development of buds, flowers and bolls of Bani (G.indicum, Lamk.) cotton in relation to branching, by K.Sawhney and B. B. Mulchandani, p.75.- A note on the root-system of Bani cotton, by K. Sawhney and D. V. Narayanayya, p.75.- Some observations on the 'Red Leaf Blight' of cotton, by K.Sawhney, p.76.- Some observations on the Dry Rot (sore-shin) of cotton, by K.Sawhney and D.V.Narayanayya, p.76.-

A note on the effect of fallow borders on the yield of cotton experiment plots of Baghdad, by K.Sawhney, p.76.- On the production of secondary root-hairs on old root-stocks of Cambodia (Gossypium hirsutum), by T.C.N.Singh, p.77,318.- Origin of lint and fuzz hairs, by V.Ramanatha Ayyar and G.Seshadri Iyengar, p.77.- Immaturity of cotton fibres in relation to the position of the seed in a lock and the length of fibres, by V.Ramanatha Ayyar and R.L.N.Iyengar, p.77.- Variation in the physical properties of fibres situated in the different regions of the seed-surface, by R.L.N. Iyengar, p.78.- A new variety, and inheritance of certain characters in cotton, by R.Balasubramanyan, p.78.- A statistical note on the comparison of mean values based on small samples, by P.C.Mahalanobis, p.88.- Studies in the acetylation of lignocellulose, Pt.II, by Pabitrakumar Das and H.K.Sen, p.215.- Some diseases of the cotton plants of the Punjab, by Md. Shafi, p.300.- Studies in physiology of Fusarium sp. from cotton, by Md.Shafi,p.330.- Angular leaf spot of Cotton, by Md.Shafi, p.301.- Daily variation of sugar in the leaves of tropical plants, by B.K.Kar, p.327. (Gossypium neglectum was included in the study).

Uganda. Dept. of agriculture. Annual report ...for the year ended 31st December 1931 (Pt.II) 78 p., illus. Entebbe, 1932.

Report of the cotton breeding section: p.24-42.- Report of the government entomologist: p.43-46. Includes report on pink bollworm, capsid bug, jassid bug, and other cotton insects.- Cotton diseases, p.59.- Field experiment on blackarm disease of cotton: p.61-62.

### Botany

Brcwn. C.H. Purity and variability in cotton. Empire Cotton Growing Rev.10(2): 108-110. Apr.1933. (Published by P.S.King and Son,Ltd., 14, Great Smith St., London,S.W.1, England)

Experiments with Egyptian cottons are instanced to "show the breeding possibilities of closer and closer examination of single plant strains of apparently pure varieties."

Chevalier, Auguste. Le Gossypium anomalam Wawra et Peyr. est-il un cotonnier ou un Cienfuegosia? Revue de Botanique Appliquée et d'Agriculture Coloniale 13: 190-195. Mar. 1933. (Published at Paris. France)

Considers that G.Anomalum is a true Gossypium, not a Cienfuegosia; but that G.africanum Watt on the contrary is Cienfuegosia ancmala Gürke.

Ela, G.A. The Egyptian cottons. Egypt Min.Agr., Plant

Breeding Sect. Leaflet 4, 16 p., illus. Cairo, Govt. press, 1932.

This pamphlet, which is introduced by a history of the Egyptian cotton, "is a short account of each of the existing varieties of the Egyptian cottons and deals with this subject according to the importance of the varieties and in the following order:- (1) The commercial varieties (2) The new strains produced by the Botanical Section, and propagated through the State Domains and the Agronomic Section contracts."

Illustrations of boll shapes and seeds of varieties, Plates I-VIII.

Table showing average results of yields and ginning-out-turns of commercial varieties, p.16.

Hunter, H., and Leake, H.M. Recent advances in agricultural plant-breeding. 361 p., illus. London, J. and A. Churchill, 1933.

"References" at end of sections.

Cotton: p.294-319.

Reviewed in Trop.Agr.[Trinidad] 10(4): 102-103. Apr. 1933; and in Empire Cotton Growing Rev.10(2): 162. Apr. 1933.

Venkatraman, S.N., and Jaganatha Rao, C. The relation of size and shape of plant to the yield of cotton. Madras Agr.Jour.21(2): 51-58. Feb.1933. (Published at Agricultural College and Research Institute, Coimbatore, S.India)

### Agronomy

Balls, W.L. Developments in cotton cultivation. Sakel and its seed supply. Manchester Guardian Com.(Egypt no.): 27, illus.Mar.25,1933. (Published at the Guardian Bldg.,Manchester, England)

Research in Egypt is being conducted on methods of fighting the pink bollworm; sub-soil water movements; new varieties, such as Giza 7; breeding for spinning quality; bale moisture content. Charts illustrate occurrence of Hindi cotton in commercial Uppers and commercial Sakel, 1926-27 and 1931-33.

Brackeen, L.O. Cotton and corn varieties. Prog. Farmer (Ga.-Ala.ed.) 48(3): 23. Mar.1933. (Published at 821 Nineteenth St., N.,Birmingham, Ala.)

Varieties for different sections of Alabama, as recommended by the Alabama Experiment Station.

Cumings, G.A., and others. Mechanical application of fertilizers to cotton in South Carolina, 1931. U.S. Dept.Agr.Circ.264, 32 p., illus. Washington, D.C. 1933.

This circular is third in a series of reports on

methods of applying fertilizers to cotton in South Carolina.

Fertilizer for cotton. *Prog.Farmer (Ga.-Ala.ed.)* 48(4): 18. Apr. 1933. (Published at 821 Nineteenth St., N., Birmingham, Ala.)

Describes a fertilizer formula, recommended by the Alabama Experiment Station, as follows: 200 pounds of superphosphate, 100 pounds of nitrate of soda (or nitrate of lime), and 25 pounds of muriate potash, for one acre of cotton.

Fielding, W.L. Rotation crops. *Empire Cotton Growing Rev.* 10(2): 111-117, illus. Apr. 1933. (Published by P.S. King and Son,Ltd.,14,Great Smith St.,London, S.W.1, England)

"A discussion, based on work carried out at the Cotton Breeding Station, Barberton, South Africa, on the question of suitable rotation crops for inclusion in a cropping scheme having cotton as the main cash crop." Notes are given for maize, soya bean, sunflowers, groundnuts, tobacco, and miscellaneous legumes.

Hale, G.A. How to get good stand of cotton. *South. Cultivator* 91(4): 5. Apr. 1, 1933. (Published by Constitution Publishing Co., Box 1731, Atlanta, Ga.)

Discusses seedbed preparation, depth of planting, and other cultural practices.

Howe, W.B. Mixed goods in the top-dressing market. *Amer. Fertilizer* 76(11): 19. May 21, 1932. (Published at 1330 Vine St., Philadelphia, Pa.)

"A fertilizer containing N and K proved better for top- or side-dressing cotton than N alone." - *Biol. Abs.* 7(3): 679. Mar. 1933.

Hubbard, J.W. Outlines of cotton culture in the San Joaquin valley of California. U.S. Dept.Agr.Circ. 256, 8 p., illus. Washington, D.C. 1933.

Kime, P.H. Results of cotton variety experiments 1930-32. N.C. Agr. Expt. Sta. Agron. Inform. Circ. 78, 4 p., tables, mimeogr. Raleigh. 1933.

Louisiana Agricultural experiment station. Soils and crop dept. A preliminary report of certain variety, fertilizer, and other tests...1932. unp., illus., mimeogr. Baton Rouge. 1932.

"The pages giving results from cotton and corn variety and cultural tests were prepared by Dr. H.B. Brown with the assistance of John R. Cotton and Harry W. Pope."

North Carolina Agricultural experiment station. Evaluation of soil types of North Carolina for different crops. N.C.Agr.Expt.Sta.Agron.Inform.Circ.77, 26 p., mimeogr. Raleigh. 1933.

Cotton: p.8-9.

Osborn, W.M. Cotton experiments at the Lawton (Oklahoma) field station, 1916-1931. Okla.Agr.Expt.Sta.Bul.209, 31 p. Stillwater. 1933.

Reynolds, E.B. Where fertilizers are profitable for cotton. Cotton and Cotton Oil News 34(13): 24,26, illus. Apr.1,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Reports some conclusions drawn from fertilizer studies since 1927, at the Texas Agricultural Experiment Station, on the various soil regions of Texas.

Stallings, J.H. Soil type and fertilizer requirements. Amer.Fertilizer 76(7): 17,28,30,32. Mar.26,1932. (Published at 1330 Vine St., Philadelphia, Pa.)

Address delivered at meeting of American Society of Agronomy, New Orleans, La., Dec.28,1932.

"The author presents data from the cotton-belt states to show that there is a direct relation between soil type and the fertilizer requirements for cotton. This relation may be reflected, (1) as a difference in the ratio of N, P and K needed, (2) as a difference in the rate of application of the same analysis fertilizer, or (3) as a difference in the yield and net profit obtained from the use of equal amounts of the same analysis fertilizer."- Biol. Abs.7(3): 684. Mar.1933.

#### Diseases

Blight, wilt, or black heart. Prog.Farmer (Car.-Va.ed.) 48(4): 8. Apr.1933. (Published at 821 Nineteenth St., N., Birmingham, Ala.)

Advises liberal use of potash on wilt-infested land.

Butler, E.J. Cotton diseases. Empire Cotton Growing Rev.10(2): 91-99. Apr.1933. (Published by P.S.King and Son,Ltd.,14 Great Smith St.,London,S.W.1, England)

An attempt to estimate losses in yield caused by important cotton diseases, and suggestions for control of each. Among diseases discussed are root rot, wilt, blackarm, anthracnose, soreshin, internal boll disease. Accounts are given of the behavior of most of these.

Insects

Chiaromonte, A. La Diparopsis castanea, Humps. sul cotone a Barentu. Agricoltura Coloniale 25(7/8): 343-348, illus. July/Aug. 1931. (Published at Viale Principe Umberto 9, Firenze, Italy)

D.Castanea on cotton in Barentu.

"Diparopsis, known as the 'red bollworm' or 'red cotton bollworm', a typical African species, distributed over Ethiopia, Anglo-Egyptian Sudan, Uganda, Nyassa and So.Africa, is described in its various stages with illustrations. Injuries caused by this insect, its biology, natural enemies and control are briefly discussed." - Biol. Abs. 7(3): 673. Mar. 1933.

Janisch, Ernst. Experimentelle untersuchungen über die wirkung der umweltfaktoren auf insekten. I.Die massenvermehrung der baumwolleule Prodenia littoralis in Ägypten. Zeitschrift für Morphologie und Ökologie der Tiere 17(1/2):339-416, illus. Feb. 1930. (Published at Verlag von Julius Springer, Berlin,Germany)

Experimental investigation of the effect of universal factors on insects. I.The propagation of the cotton worm Prodentia littoralis in Egypt.

"Outbreaks of the cotton worm (P.littoralis) in lower Egypt begin every yr. in the spring, reach their maximum in July, and then subside rapidly without the aid of parasites. Duration and ending of the outbreak is completely determined by temp.; hence, this is a very simple class of outbreak to study, as temp.experiments constitute the chief part of the research." -Biol. Abs. 7(3): 674. Mar. 1933.

Oklahoma agricultural and mechanical college. Extension division. Eighteenth annual report...1931. Okla. Agr. Col.Ext.Circ.295 (Gen.ser.228), 112 p., illus. Stillwater. [1931]

Cotton insect control: p.53-55. Boll weevil control.

Farm Engineering

Better farm implements. Prog. Farmer (Ga.-Ala.ed.) 4 (4): 8. Apr.1933. (Published at 821 Nineteenth St.,N., Birmingham, Ala.)

The advantages of use of farm machinery, as described by Professor M.L.Nichols, Alabama Polytechnic Institute, include reduced cost of production and power of carrying out other activities, such as live-stock raising, in addition to cotton cultivation.

Farm Management

Bryan, A.B. Two-horse tools show profit now. Prog. Farmer (Ga.-Ala.ed.) 48(3): 4, illus. Mar.1933.

(Published at 821 Nineteenth St., N., Birmingham, Ala.)  
 Summary of investigation by the South Carolina Extension Service.

"A net saving of 31 hours per acre" by use of two-horse cultivators was found.

Butler, Tait. "--Make the South prosper." Prog. Farmer (Ga.-Ala.ed) 48(3): 26. Mar. 1933. (Published at 821 Nineteenth St., N., Birmingham, Ala.)

Production of feed crops and less cotton is suggested.

Haag, J.F. Why not plant every third row of cotton to cowpeas this year? Okla. Farmer-Stockman 46(7): 116. Apr. 1, 1933. (Published at Oklahoma City, Okla.)

#### Production Credit

Ford, A.W. Federal control goes south. New Republic 74(951): 41-43. Feb. 22, 1933. (Published at 421 West 21st St., New York, N.Y.)

The writer discusses the small cotton farmer's credit method of financing his crop, the system of government loans to the grower, and the probable effect of such loans on acreage control and crop diversification.

#### Cooperation in Production

Caulfield, John. Texas and Oklahoma farmers make their own cotton tests. Community projects succeed only when staple selected is better than that previously grown. Okla. Cotton Grower 13(8): 2. Apr. 15, 1933. (Published at 10 West Sixth St., Oklahoma City, Okla.)

The School Land community, near Gonzales, Texas, and the Shawnee community of Oklahoma are cited as examples of successful one-variety communities.

Shanklin, J.A., Campbell, R.C., and Jensen, W.C. Community production of cotton in relation to yield and staple length. S.C. Agr. Expt. Sta. Circ. 48, 26 p., illus. Clemson College. 1933.

"In cooperation with United States Department of Agriculture, Bureau of Plant Industry."

Studies were made of four communities representing different conditions and areas of the state of South Carolina.

#### PREPARATION

#### Ginning

Adams, Orville. One hundred million dollar loss in five

years by ginners. The industry faces gigantic failures. Cotton and Cotton Oil News 34(13): 14,18,38,42, tables. Apr.1,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Results of a five-year survey of the ginning industry in Texas.

Bennett, C.A. Early years of the cotton gin. Cotton and Cotton Oil News 34(13): 5-7, illus. Apr.1,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Appendix. Whitney's spike gin patent (from "Cotton and Cotton Oil" by D.A.Tompkins, 1901): p.7-10, 44-45,47, illus.

Illustrations are included of gin models and of the U.S. Cotton Ginning Laboratory at Stoneville, Miss.

Claybrooke, W.D. President's address, Alabama ginners association. Oil Miller and Cotton Ginner 42(2): 9-10. Apr.1933. (Published at 161 Spring St., N.W., Atlanta,Ga.)

Address at meeting of Alabama Ginners Association in Birmingham, Apr.12,1933. Main emphasis is on ginning costs.

New cotton drying method perfected by John E. Mitchell company. Cotton Giners Jour.4(7): 8, Apr.1933. (Published at 109 North Race St.,Dallas, Tex.)

"The drying is done in the extracting and cleaning machinery between the feeding mechanism and the gin stands." The new process is called the "Uniform feed drying method."

Smith, H. C. Speed and vigor mark ginners meeting . Oil Miller and Cotton Ginner 42(2): 8. Agr.1933. (Published at 161 Spring St.,N.W., Atlanta,Ga.)

Report of eighth annual convention of Alabama Ginners Association in Birmingham, Apr.12,1933.

### Baling

Bennett, Alonzo. The cotton compress. Cotton Digest 5(24): 9. Apr.29,1933. (Published at Houston, Tex.)

A short history of compress services since installation of the first cotton compress at Savannah, Ga., in 1844.

Schofield, R.K. Capacitance hygrosopy and some of its applications. Nature 131(3299): 96-97. Jan. 21, 1933. (Published by Macmillan Co., 60-62 Fifth Avenue, New York, N.Y.)

The writer criticises W.L.Balls' method of determining moisture content of soils and cotton bales, and

notes the necessity of proving whether the capacitance readings are sensitive to frequency.

## MARKETING

### General

Conference of West Indian Sea Island cotton growers, Barbados, 1932. West Indian cotton conference, Barbados, 1932. 42 p., tables, [n.p.] Advocate co., ltd., 1932.

Tables are included for prices, production, area, and yield per acre of West Indian Sea Island cotton, 1921-1930.

Renouard, Alfred. Les fluctuations des matières premières textiles au cours de l'année 1932. Association Cotonnière Coloniale Bulletin Trimestriel 31(10): 41-46. Apr. 1933. (Published at 55, Rue de Chateaudun, Paris, France)

From Fils et Tissus, Jan. 1933.

Fluctuations of textile raw materials during 1932.  
An analysis of the cotton market situation in 1932.

### Demand and Competition

Abdel Wahab, Ahmed. Broadening the market for Egyptian cotton. A campaign in many lands. Manchester Guardian Com. (Egypt no.): 25,27. Mar. 25, 1933. (Published at the Guardian Bldg., Manchester, England)

As result of campaign ,consumption of Egyptian cotton has been increased in Germany, Italy, Japan, Spain, Hungary and Austria. Statistics are given for exports, 1928/29-1931/32.

Barber-Lomax, J.A. Spinning trade reorganisation. Cartelization as a first step. Textile Weekly 11(266): 139,138. Apr. 7, 1933. (Published at 49 Deansgate, Manchester, England)

China year book 1932. Ed. by H.G.W. Woodhead. 831 p., illus. London, Simpkin, Marshall, ltd.; Chicago, University of Chicago press; Shanghai, North-China daily news and herald, ld. [1932]

The Chinese cotton industry: p.101-109.

Cultivation of cotton substitutes. U.S. Dept. Com., Bur. Foreign and Dom. Com., Russian Econ. Notes (229): 2-3. Apr. 21, 1933. (Published at Washington, D.C.)

From PRAVDA, Mar. 21, 1933.

Kenaf, kendyr, ramie, and "kanatnik" are described. More than 120,000 hectares of land are now planted to these cotton substitutes in the Soviet Union, and in 1930 a scientific research institute was created for studying their cultivation and processing.

Ellinger, Barnard. Japan: her commerce and finance. II.Textile prices, wages, organisation. Manchester Guardian Com.26(667): 248. Apr.1,1933. (Published at the Guardian Building, Manchester, England)

End of more-looms dispute in English cotton textile industry. U.S.Dept. Labor, Bur. Labor. Statis., Mo. Labor Rev.36(3): 563-564. Mar.1933. (Published at Washington, D.C.)

"Data are from report of Wallace E.Moessner, American vice consul, Manchester, England, Dec.31, 1932."

"On December 28, 1932, representatives of the Cotton Spinners' and Manufacturers' Association and of the Weavers' Amalagamation signed an agreement for the working of six looms per weaver, which was to become effective as from the first week in January, 1933. This ends a controversy which has extended over five years."

Glassford, S.R. "Maldistribution". Causes and cures. Amer.Silk and Rayon Jour.52(4): 19-20. Apr.1933. (Published at 34 N.Crystal St., East Stroudsburg, Pa.)

"All factors that intervene between the actual production at the mill and the sale of the finally completed unit must be regarded as processes, and those involved must consider themselves not as opponents, but as essential partners in the accomplishments."

Haselden, Lester. A suggestion for Egypt's cotton growers. Supplying the spinner of hosiery yarns. Manchester Guardian Com. (Egypt no.): 28-29, illus. Mar. 25, 1933. (Published at the Guardian Bldg., Manchester, England)

Suggests cultivation in Egypt of a variety of cotton such as Peruvian Tanguis, which is used mainly in England for spinning of hosiery yarns.

Illustrations show cotton scenes in Egypt.

Hunt, S.B. The growth of rayon usage in cotton mills. Com.and Finance 22(16): 365-336, table. Apr. 19,1933. (Published by Theo. H.Price Publishing Corp., 95 Broad St., New York, N.Y.)

Knapp, J. G. The home market for North Carolina cotton. N.C.Agr.Exp.Sta.Bul.284, 58 p., illus. Raleigh. 1933.

This study "undertakes to examine the mill demand for cotton in the state in relation to the supply of cotton grown in the state with the purpose of showing to what extent North Carolina farmers produce cotton for the North Carolina 'home market'". Data on mill requirements were obtained by questionnaires

sent to "approximately all the cotton mills in the state", 1927-1931.

Lancashire and Indian cotton. A move to encourage greater use. *Textile Weekly* 11(264): 87. Mar. 24, 1933. (Published at 49 Deansgate, Manchester, England)

Lancashire's use of Indian cotton. *Indian Textile Jour.* 43(509): 165. Feb. 1933. (Published at Military Sq., Fort, Bombay, India)

"Two points may be advanced for consideration. The first is that India has already made considerable progress in evolving and growing improved varieties of cotton on a commercial scale, and with the impetus of a steadily growing demand from Lancashire, India's progress would be rapid. Secondly, even as it is, it is a matter requiring explanation by Lancashire manufacturers why Japan should be able to use short-stapled Indian cotton successfully in her mills, and why Lancashire should not."

Murchison, C.T. Requisites of stabilization in the cotton textile industry. *Amer. Econ. Rev.* 23(1): 71-80. Mar. 1933, supplement. (Published by American Economic Association, Northwestern University, Evanston, Ill.)

Paper read at 45th annual meeting of the American Economic Association, Dec. 28, 1932.

"All important readjustments of organization and structure are definitely in the direction of closer integration of processes all the way from spinning to the final marketing. It is a movement which properly conceives the merchandising function as predominant in control. It aims to minimize commission selling, to transfer financing to the factoring houses and the commercial banks, to reduce the converter from whimsical independence to departmental conformity, to reshape the mills into obedient technical servants. It requires that cotton staple from the standpoint of the mills shall be merely a raw material and not a commodity for speculation; that profits shall come from the creation of utilities and not from shrewd trading among the component parts of the industry; that in the performance of the long sequence of processes from the cotton field to the cloth counter there shall be directness and co-ordination instead of indirection and conflict; that in the analysis of consumer requirements there shall be knowledge and precision instead of guessing and gambling."

Penn, L.H. Textile trade of South Africa. *Manchester Guardian* Com. 26(667): 249. Apr. 1, 1933. (Published at the Guardian Building, Manchester, England)

A letter to the editor urging government subsidy of the Lancashire cotton industry. The writer refers

to articles by W. F. Machin on the future of Lancashire.

Plans to stabilize cotton textiles. Developments in various countries. *Textile Weekly* 11(265): 111, 117. Mar. 31, 1933. (Published at 49, Deansgate, Manchester, England)

Rao, K.S. Economics of hand-weaving. *Indian Textile Jour.* 43(509): 171. Feb. 1933. (Published at Military Sq., Fort, Bombay, India)

Extracts from address delivered before the Chanakya Economic Society, Patna College, India.

Woolsey, C.S. Buying movement in textiles gains. *Dun and Bradstreet Monthly Rev.* 41(2061): 28-29, illus. Apr. 1933. (Published at 290 Broadway, New York, N.Y.)

Chart shows cotton consumption by thousands of bales, 1929-February 1933.

World textile production. The trend of activities in graphical form. *Textile Weekly* 11(267): 163, illus. Apr. 14, 1933. (Published at 49, Deansgate, Manchester, England)

Abstract of "survey of industrial production in principal manufacturing countries", during the past six years, which appeared in the "Board of Trade Journal."

#### Supply and Movement

Achard, E. La culture du coton en Syrie en 1932. *Association Cotonnière Coloniale Bulletin Trimestriel* 31(10): 48-50. Apr. 1933. (Published at 55, Rue de Chateaudun, Paris, France)

Cotton cultivation in Syria in 1932.

Avigdor, S. Le coton et les problèmes de l'exploitation du sol en Egypte. *L'Europe Nouvelle* 15(777): 1521-1525. Dec. 31 1932. (Published at Quai d'Orsay, Paris, France)

Cotton and problems of soil utilization in Egypt.

As remedy for the present crisis in the cotton crop, upon which the economic and social structure of Egypt depends, the author suggests: diversification of crops to utilize the various qualities of the soil in the Nile valley, raising livestock and grain on land unsuited to cotton cultivation; and continued production of long-staple cotton, improved by one-variety communities, and elimination of Hindi cotton.

Boyle, J.E. Planned cotton production. *Cotton Digest* 5(24): 11. Apr. 29, 1933. (Published at Houston, Tex.)

The author discusses the probable result of planning.

Faulkner, O.T., and Mackie, J.R. West African agriculture. 168 p., illus. Cambridge [Eng.] University press, 1933.

Cotton: p.117-123. Cultivation, types grown, etc. The economic side of the subject is stressed.

Reviewed in Empire Cotton Growing Rev.10(2): 162-163. Apr.1933.

Final general memorandum on the cotton crop of 1932-33. Indian Trade Jour.108(1393): 684-688, tables. Mar.2, 1933. (Published by Department of Commercial Intelligence and Statistics, Calcutta, India)

Includes detailed figures for each province and state in India, and figures for exports, mill consumption, and inter-provincial trade.

Jensen, W.C., Russell, B.A., and Guin, Marvin. An economic study of Sumter county agriculture. S.C.Agr.Expt. Sta.Bul.288, 72 p., illus. Clemson College. 1933.

Cotton is the leading crop grown in this area.

Marketing of cotton: p.50-52.

Nigeria. Dept. of agriculture. Annual report for the year 1931. 30 p. [Lagos] 1932.

Cotton exports: p.7-8; yield and grading: p.19.

Sanders, J. T. A long-time view of the competitive position of Oklahoma cotton producers. Current Farm Econ.(ser.49) 6(2): 25-31, tables. Apr.1933. (Published by Oklahoma Agricultural Experiment Station, Stillwater, Okla.)

Competition of Oklahoma and the United States with world cotton production.

Table 3. Acreage of all crops and cotton per agricultural worker in important cotton-producing areas of the world: p.30.

Todd, J.A. Cotton statistics. World's crops--American and Egyptian. Empire Cotton Growing Rev.10(2): 118-125, illus. Apr.1933. (Published by P.S.King and Son, Ltd., 14, Great Smith St., London,S.W.1, England)

Includes tables of production and chart of American and outside growths, 1902-1932.

Todd, J.A. The world's cotton supplies. Why Empire cotton is still needed. Empire Cotton Growing Rev. 10(2): 81-90, illus. Apr.1933. (Published by P.S. King and Son, Ltd., 14, Great Smith St., London, S.W.1, England)

"A survey of the modern history of the cotton trade" of the world since 1902. Illustrated by diagram of consumption of the American crop for the period studied.

Empire cotton is needed largely to replace the American crop, which on the average is smaller than before the World War, while United States consumption of American cotton has increased, and the quality has deteriorated, which fact makes necessary increased production of Egyptian, Indian and Peruvian cottons.

Van Valkenburg, S. Agricultural regions of Asia. Pt. IV. India. Econ. Geog. 9(2): 109-135, illus. Apr. 1933. (Published at Clark University, Worcester, Mass.)  
Cotton cultivation: p. 127-129.

### Prices

Wells, O. V. Farmers' response to price. A selected bibliography. 26 p., mimeogr. Washington, D.C., U.S. Dept. of agriculture, Bureau of agricultural economics, 1933.  
For references to cotton see the index.

### Marketing and Handling Methods and Practices

Blackwell, Jack. Country damaged cotton results in large annual loss. The principle causes of country damage. Cotton Ginner's Jour. 4(7): 19-20. Apr. 1933. (Published at 109 North Race St., Dallas, Tex.)

The writer urges proper care of the bale from the gin to the mill warehouse.

Burton, C.S. Improving prospects for commodities. Public interest increases in organized markets as outlook brightens for leading staples--possibility of ultimate inflation anticipated. Magazine of Wall Street 51(12): 620-623, 646, 647. Apr. 1, 1933. (Published at 90 Broad St.; New York, N.Y.)

The writer states that he attempts here "to outline the work of various futures markets, the principal factors which influence their movements, the manner in which the public may participate, the current situation and the long time outlook so far as the confusion of the times will permit." Commodities are wheat, cotton, sugar, copper, silk and rubber.

Taylor, A.S. The greater menace. Cotton Digest 5(18): 7. Feb. 11, 1933. (Published at Houston, Tex.)

The author considers commission buying a menace to the cotton merchant.

### Services and Facilities

Chicago as a cotton market. Com. and Finance 22(17): 384. Apr. 26, 1933. (Published by Theodore H. Price Publishing Corp., 95 Broad St., New York, N.Y.)

Discussion of cotton futures trade on the Chicago Board of Trade during April 1933, from remarks of

James E. Bennett, chairman of the cotton committee.

De Barbieris, M. The southeastern mill broker. Cotton Digest 5(23): 5. Apr.22,1933. (Published at Houston, Tex.)

A defense of the southeastern mill broker, and discussion of his relations with the shipper.

Mobile cotton port. Cotton Digest 5(23): 6. Apr.22, 1933.  
(Published at Houston, Tex.)

Description of port of Mobile, Ala.

Spotswood, A.D. [History of Mobile] Cotton Trade Jour. 13(16): 7,8. Apr.22,1933. (Published at New Orleans, La.)

A history of the port of Mobile, Ala., from establishment as a colony in 1711, to the present.

### Cooperation in Marketing

Lest we forget. Staple Cotton Rev.11(3): 1-3. Mar.1933.  
(Published at Greenwood, Miss.)

"A resume of the facts of the situation which impelled the adoption of the course" which was followed in the handling of 1930 cotton by the Staple Cotton Cooperative Association.

### UTILIZATION

#### Fiber, Yarn, and Fabric Quality

Adams, R.H. Some elementary facts in textile testing. Textile Bul.44(6): 3-4. Apr.6,1933. (Published at 118 West Fourth St., Charlotte, N.C.)

"Paper presented at meeting, Southeastern Section, American Association of Textile Chemists and Colorists."

The essentials of successful laboratory practice in the cotton mill.

Ahmad, Nazir. Notes on the harmful effects of adulterating good quality Indian cottons. India. Indian Cent. Cotton Com., Technol. Lab., Leaflet 1, 3 p. Bombay, Times of India press, 1932.

The results of these spinning tests on prepared mixings of long and short staple Indian cottons were given in detail in Technol. Bul. (series A) No. 20.

Atsuki, Katsumoto, Sobue, Hiroshi, and Kitajima, Kozo. The structure of cellulose gel. Report 4. The mechanism of sorption of vapours by cellulose gels. Jour.Soc. Chem. Ind., Japan, Suppl.Binding 35(12): 584B-587B, illus. Dec.1932. (Published at Department of Applied Chemistry, Faculty of Engineering, Tokyo Imperial University,

Tokyo, Japan)

"Experiments are reported on the rate of absorption of vapours of organic solvents by scoured and by mercerised cotton. The conclusion drawn is that sorption is conditioned by adsorption and swelling, adsorption being governed by the vapour density, surface tension, and vapour tension of the liquid, and swelling by the polarity of the hydroxyl groups and oxygen bridge in the cellulose molecule."—Jour. Textile Inst. 24(3): A162. Mar. 1933.

Belger, O.A. Modern testing methods. Cotton yarn uniformity assured and spinning costs reduced by two recently developed machines--automatic roving tester and draft roll spacing determinator. Amer. Wool and Cotton Rptr. 48(16): 19, 21-23, illus. Apr. 20, 1933. (Published by Frank P. Bennett and Co., Inc., 530 Atlantic Ave., Boston, Mass.)

"Read at recent meeting of Committee D-13 in New York."

Illustrates and describes the machines.

Chowdhury, J.K., and Basu, N.N. A comparative study of jute and cotton celluloses. Jour. Indian Chem. Soc. 9(12): 615-631. Dec. 1932. (Published at 92, Upper Circular Road, Calcutta, India)

Clark, G.L., and Southard, Julia. Imbibition by cotton fibers of water and of solutions of chemical reagents. Jour. Home Econ. 25(3): 228-234, illus. Mar. 1933. (Published at 101 East 20th St., Baltimore, Md.)

References: p. 234.

"The dimensions of the unit cell of cotton cellulose are not changed by the moisture taken up at ordinary conditions of temperature and pressure. The water is held superficially and is intermicellar, not intramicellar."—Conclusions.

Classing and grading cotton at the mill. Cotton 97(4): 69-70. Apr. 1933. (Published by W.R.C. Smith Publishing Co., Atlanta, Ga.)

Letter to the editor from "Contributor No. 6195."

Writer describes methods of classing at his mill and notes that the following staples are satisfactory for his requirements: "For 18s to 24s, Government 1-inch, For 36s to 40s, Government 1-1/16-inch, For 50s to 60s, Government 1-5/32-inch, For 70s to 80s, Government 1-7/32-inch."

Czapla, Karl. Seltene erdmetalle im dienste der pflanzen-  
aschendiagnostik II. Aschenpräparation wichtiger pflanz-  
licher und tierischer rohstoffe der textilindustrie  
sowie daraus hergestellter gewebe mittels lösungen  
seltener erdmetalle. Faserforschung 10(1): 20-42, il-  
lus. 1932. (Published at Königstrasse 2, Leipzig C.1.,  
Germany)

"Fibres of various origins give different ash structures when previously impregnated with solutions of salts of the rare earth series, such as thorium and cerium nitrates...Jute and hemp do not give characteristic structures, but cotton, flax, ramie, nitro, cuprammonium, and viscose rayons, and raw, souple, schappe, and bourette silks give characteristic ash structures, which are described in a table. A second table gives the characteristic ashes for fabrics, of the same or different fibres for warp and weft."—*Jour. Textile Inst.* 24(3): A162. Mar. 1933.

Dawson, J.H. Cotton yarns for hosiery. Lisle thread, Durene, rayon, sewing threads, boucle, knop marl and grandelle. *Textile Amer.* 59(4): 42, 56. Apr. 1933. (Published at 440-442 Old South Bldg., Boston, Mass.)

Classifies and describes yarns and threads made from cotton.

Faraday society, London. The colloid aspects of textile materials. A general discussion. 368 p., illus. [Aberdeen, University press, 1932?]

The second Colloid Meeting of the Colloid Committee of the Faraday Society was held at the University of Manchester, Sept. 21-23, 1932.

The papers presented are divided into three groups: Pt.I.General: Raw materials and their constitution.—Pt.II.Fibre particles: their Production, deformation, and degradation.—Pt.III.Manufacturing processes. General discussions of papers are included following the paper.

Partial contents.—The fine structure and the mechanical properties of fibres. By H. Mark, p.6.—The molecular structure of polysaccharides. By W.N.Haworth and E.L. Hirst, p.14—Viscosity investigations for the examination of the constitution of natural products of high molecular weight and of rubber and cellulose. By H. Staudinger, p.18.—The molecular weight of acetocellulose and nitrocellulose. By E.H.Büchner and P.J.P.Samwel, p.32.—On a shaking effect in cellulose solutions and other sols detected by means of Tyndall light. By R.O.Herzog, O. Kratky, and E.Petertil, p.60.—Relations between the refractive indices and the behaviour of cellulose fibres. By J.M.Preston, p.65.—The structure of xerogels of cellulose and derivatives. By S.E.Sheppard, p.77.—Researches on the change in the lattice of nitrocellulose. by J.J. Trillat, p.85.—Surface films of cellulose derivatives on aqueous solutions. By N.K.Adam, p.90.—The molecular aggregation of nitricellulose. By F.D. Miles, p.110.—Contribution to the study of the degree of ripening of cotton. By Olivier Roehrich, p.218.—The modification of natural cotton cellulose by swelling and by degradation. By S.M.Neale, p.228.—The laws of swelling. By J.R.Katz, p.279.—Some difficulties in cotton yarn mercerisation. By P.S.Krais, p.355.

Garrer, Walter. Mildew in the textile industry. Indus. Chem. and Chem. Manfr. 8(95): 445-448, illus. Dec. 1932.  
(Published in London, England)

References: p.448.

"Recent work on mildews is reviewed under the headings of--effect of growth of mildews on textile materials, description of the organisms responsible, the factors governing their growth, and practical applications of the work upon the limitations of their growth."--Jour. Textile Inst. 24(2): A112. Feb. 1933.

Also in Textile Colorist 55(650): 95-98, 132. Feb. 1933.

Grimes, M.A. The effect of sunlight and other factors on the strength and color of cotton fabrics. Tex. Agr. Expt. Sta. Bul. 474, 56p., illus. College Station. 1933.

Literature cited: p.53-56.

"From this study it is concluded that to lose the least strength upon exposure to sunlight, a cotton fabric should be composed of unbleached, mercerized, coarse, hard twisted yarns. If dyed, a vat dye with protective characteristics and in a high concentration should be used."--Summary.

Grimshaw, A.H. Comparison of the rosette and flannel cotton methods of wetting out or sinking tests. Meliand Textile Monthly 5(1): 15-17, illus. Apr. 1933.  
(Published at 305 Washington St., Brooklyn, N.Y.)

"The tests did not prove which was the more accurate, but we found that the rosettes were easier to handle than the flannel."--Conclusions.

Heim de Balsac, F., and Roehrich, O. Etude technologique de cotons de l'Oubangui-Chari. Bulletin de l'Agence Générale des Colonies 26(286): 83-89, illus. Jan. 1933.  
(Published at Galerie d'Orleans, Palais-Royal, Paris, France)

Technological study of cottons of Ubangi-Shari, French Congo.

Justin-Mueller, E. Aqua-fibre, hydro-activité et diffusion. TIBA 10(12): 991, 993, 995, illus. Dec. 1932.  
(Published at 61, Avenue Jean-Jaurès, Paris, France)

"The differences in hydroactivity of different fibres in the same liquid (i.e., bleached and unbleached cotton) evidently cannot be attributed to differences in surface tension. The resistance of fibres to wetting is attributed to foreign (non-fibrous) substances or to 'Hydroinactivity' which retard diffusion into the fibres. The mechanism of the action of wetting agents is considered to be due to their increasing the diffusive power of aqueous liquids. (Copied complete from Chem. Abs., 1933, V.27, P.1179).--Textile Research 3(7):368. May 1933.

Abstract also in Jour. Textile Inst. 24(3): A149. Mar. 1933.

Klaus, R. Influence of the precipitating process upon the micellar structure of cellulose fibers. Rayon and Synthetic Yarn Jour. 14(3): 20-21. Mar. 1933. (Published at 303 Fifth Ave., New York, N.Y.)

Translation of article in "Kunstseide," Jan. 1933, p. 9.

"It is very important to investigate the influence of the various precipitation processes in shrink- and stretch-spinning on the micellar structure of the fibres. The micelles form the so-called backbone of the cellulose, and the more or less pronounced orientation of the micelles determines a number of different properties which are characteristic features of the cellulose hydrate filaments so formed."—Textile Research 3(7): 369. May 1933.

Krais, P., Krauter, G., and Weinges, H. Ein neuer apparat zur prüfung der reissfestigkeit von fasern, garnen und flächengebilden. Monatschrift für Textilindustrie 47(12): 238-239, illus. Dec. 1932. (Published at Theodor Martins Textilverlag, Leipzig, Germany)

"Improvements are described in the Deforden testing instrument for fibres, yarns, and fabrics."—Jour. Textile Inst. 24(3): A103. Mar. 1933.

Lewis, J.W. Test for chemically damaged cotton fibres. Jour. Textile Inst. 24(3): T122, illus. Mar. 1933. (Published at 16 St. Mary's Parsonage, Manchester, England)

The fibers are treated with sodium zincate and observed under microscope. The preparation of sodium zincate is described. Photographs of damaged fibers, magnified, are included. The test "is particularly useful for the examination of the fibres surrounding small holes in a fabric," damaged by acid or over-bleaching.

Lipcwsky, E. Beiträge zur gespinstprüfung. Melliand Textilberichte 13(10): 518-521, illus. Oct. 1932. (Published at Heidelberg, Germany)

To be continued.

"A general account is given of the methods of testing yarns, including determinations of twist, strength, counts, etc., and of the nature, staple, fineness, and strength of the constituent fibres. The Moscrop, Holzach and Dietz, and Herzog yarn-testing devices are briefly described and the evaluation of the results is discussed. Data are given for cotton and woollen yarns."—Jour. Textile Inst. 24(3): A103. Mar. 1933.

Lipcwsky, E. Die kräuselung der baumwollfaser, ihre messung und ihre veränderung durch die verarbeitung. Spinner und Weber 51(15): 1-3. Apr.14, 1933. (Published at Gellertstrasse 7/9, Leipzig, Germany)

The curliness of cotton fiber, its measurement, and its variation through the manufacturing processes.

Lüdtke, Max. Über einige neue methoden der faserforschung. Faserforschung 10(1): 43-58, illus. 1932. (Published at Königstrasse 2, Leipzig C.1., Germany)

New method of fiber analysis.

"This article describes the following methods of analysing vegetable fibers--decomposition by means of caustic soda or sulphite, swelling tests in cuprammonium solution, carbonisation, followed by measurement of the fibrillae, reaction with alcoholic phloroglucinol, detection of cellulose with chlorzinc-iodide and other colour reactions, and chemical tests for xylan and mannan. Microphotographs are reproduced."--Jour.Textile Inst.24(3): A162. Mar.1933.

Discussion by Kurt Schneider, "Über eine neue methoden der faserforschung", Faserforschung 19(1): 59-62. 1932.

M., M. Knitterfeste kunstseide. Spinner und Weber 51 (2): 10-11. Jan. 13,1933. (Published at Gellertstrasse 7/9, Leipzig, Germany)

Ccreaseless rayon.

"A short note on the new Tootal Broadhurst process for impregnating cotton and rayon fibres with synthetic resins. The writer appears to suspect that the process is attended by a grave risk of tendering by acids and of destruction of dyes, and believes that the producers and not the finishers are the more likely to solve the problem of 'creaseless rayon.'"--Jour.Textile Inst.24(3): A155. Mar. 1933.

Mecheels, Otto. Wie lässt sich durch mercerisation hochglanz erzielen? Melland Textilberichte 13(12): 645-649, illus. Dec.1932. (Published at Heidelberg, Germany.)

"The results of investigations of the influence of temperature, tension, and alkali concentration in the mercerising process, and of scouring, drying, and after-treatments on the lustre of the mercerised product are summarised."--Jour.Textile Inst. 23 (4): A151. Mar.1933.

Morey, D.R. The measurement of molecular orientation in fibres. Textile Research 3(7): 325-345, illus. May 1933. (Published at 65 Franklin St., Boston Mass.)

Method and apparatus are described.

Neale, S.M. Some observations on the quantitative description of the dyeing properties of direct cotton colours. Jour.Soc.Chem.Indus.52(13): 88T-90T. (Published at Central House, 46, Finsbury Square, London, E.C.2, England)

A new coloured weft yarn. Overcoming "barring" in gaberdines. Textile Weekly 11(267): 167,170. Apr. 14, 1933. (Published at 49,Deansgate, Manchester, England)

New type yarn. Fibre and Fabric 86(2514): 13-14. Apr. 8, 1933. (Published at 465 Main St., Cambridge, Mass.)

Description of Rayallen, an untwisted yarn invented by W.R.Allen, of Radcliffe, England.

Oguri, Sutezo. Chemical investigation of bamboo.X.X-ray study of bamboo cellulose. Cellulose Indus.9(3): 7-8, illus. Mar.1933. (Published at Dept. of Applied Chemistry, Faculty of Engineering, Tokyo Imperial University, Tokyo, Japan)

"Abstracts from the Transactions."

It was found that bamboo cellulose has the same crystallographic property as cotton cellulose.

Oguri, Sutezo. Hygroscopic moisture of cellulose X. On the velocity of sorption of water vapour on cellulose. Jour.Soc.Chem.Ind., Japan, Suppl. Binding 35 (11): 507-515B, illus. Nov.1932. (Published at Department of Applied Chemistry, Faculty of Engineering, Tokyo Imperial University, Tokyo, Japan)

"The sorption of water vapour by cotton cellulose under constant pressure and temperature proceeds in two stages at least. The velocity of sorption in each stage is expressed fairly well by Lagergren's equation."—Jour.Textile Inst.24(3): A171. Mar.1933.

Passiv- und kristallgarn. Eigenschaften und verwendungsmöglichkeiten. Spinner und Weber 51(4):9-10. Jan. 27, 1933. (Published at Gellertstrasse 7/9, Leipzig, Germany)

"An account is given of the behaviour and properties of 'passive' and 'crystal' cotton yarns. These yarns are chemically treated by a patented process which causes them to be indifferent to cotton dyes and to be coloured by acetate rayon dyes... 'Passive' yarns are made from ordinary cotton and 'crystal' from mercerised cotton."—Jour.Textile Inst.24(3): A155. Mar.1933.

Ridge, B.P., and Turner, K. The analysis of cotton and viscose rayon mixtures. Jour.Soc.Chem.Indus.52(13):

86T-88T. Mar.31,1933. (Published at Central House, 46, Finsbury Square, London, E.C.2, England)

Schwarz, E.R. An introduction to the micro-analysis of yarn twist. Jour.Textile Inst.24(3): T105-118, illus. Mar.1933. (Published at 16, St.Mary's Parsonage, Manchester, England)

"A rational examination of the structural factors in single and plied yarns and an attempt to compare existing conditions with a theoretical or ideal condition" are described.

Simon, C.L. Wearing qualities of synthetic yarn lining fabrics and methods used in testing. Melland Textile Monthly 5(1): 13-14, illus. Apr.1933. (Published at 305 Washington St., Brooklyn, N.Y.)

To be continued.

"Paper presented before the Metropolitan Textile Section of the A.S.M.E., Feb.7, 1933."

Results of a study on silk, woolen, and cotton materials.

"Tester." Yarn counts. Their origin and determination. The why and wherefore. Determining equivalent counts. Textile Amer.59(4): 50-51. Apr.1933. (Published at 440-442 Old South Bldg., Boston, Mass.)

From "The Hosiery Trade Journal."

"The principle of yarn spinning invariably rests upon the two factors--weight and length, and the term count is the outcome of the relation between these two."

Tomoda, Yoshinori. Fermentation of cellulose by thermo-phobic bacteria. Jour.Soc.Chem.Ind., Japan, Suppl. Binding 35(11): 534B-536B. Nov.1932. (Published at Department of Applied Chemistry, Faculty of Engineering, Tokyo Imperial University, Tokyo, Japan)

"A bacterium, thought to belong to a species of Clostridium thermocellum, has been isolated from stable manure. It has the power of rapidly decomposing some forms of cellulose, the forms most easily attacked being the natural ones such as cotton wool, hemp fibre, or wood cellulose. Rayon is less easily attacked. The author considers that the fermentability of cellulosic materials depends upon their microscopical structures rather than their colloidal structures. The natural cellulose fibre, being porous and spongy, is more easily attacked than the smooth compact artificial fibre which the bacteria cannot enter so easily."—Jour.Textile Inst.24(3): A169. Mar.1933.

Walker, A.C., and Quell, M.H. Influence of ash constituents on the electrical conduction of cotton. Jour.

Textile Inst. 24(3): T123-T130, tables. Mar. 1933. (Published at 16, St. Mary's Parsonage, Manchester, England)

"Evidence will be presented in this paper to show that the improvement in d.-c. insulation resistance of cotton, secured by washing, is accompanied by a reduction in the inorganic ash content from about 1% of the dry cotton weight to a value generally less than 0.3 percent."

Cotton has been given primary consideration "since it is the most economical material available for use in telephone apparatus insulation, and the improvements in electrical properties secured by water washing have led to its substitution for silk to a large extent in the telephone industry."

Walker, A.C., and Quell, M.H. Naturally-occurring ash constituents of cotton. Distribution of ash constituents as salts and changes resulting from washing in aqueous solutions. Jour. Textile Inst. 24(3): T131-T144, illus. Mar. 1933. (Published at 16, St. Mary's Parsonage, Manchester, England)

Bibliography: p. T139.

Appendix: P.T140-144. Method of washing cotton.

"Although these analytical data were secured in an investigation of the electrical properties of cotton, they are the subject of a more general discussion in this paper."

Webb, R.W. Cotton fiber quality. Amer. Wool and Cotton Reporter 47(15): 14. Apr. 13, 1933. (Published at 530 Atlantic Ave., Boston, Mass.)

Extracts from paper read at meeting of Committee D-13 of American Society for Testing Materials, in New York, N.Y., Apr. 6-7, 1933.

Extracts also in Textile Bul. 44(7): 31. Apr. 13, 1933.

Wilkie, J.B. Mercerization of cotton for strength with special reference to aircraft cloth. Natl. Advisory Com. Aeronautics Tech. Notes 450, 16 p., illus., mimeogr. Washington. February, 1933.

"The general conclusion to be drawn from this work is that the strongest mercerized yarn of a given count from a given quality of cotton is obtained under the following conditions: 1. Use of low-twist yarn obtained with twist multipliers from 2.2 to 3.-2. Thorough pretreatment of the yarn to remove all extraneous materials.-3. Mercerization at a temperature of 0° C, or lower.-4. Use of sufficient tension during mercerization to prevent the yarn from contracting more than 3 percent.-5. Use of caustic solution having a concentration of 10 percent, or higher.-6. The time of mercerization to be 5 minutes. The resulting yarn

should be from 40 to 100 percent stronger than the original yarn of the same weight."—Conclusion.

Reprinted with slight changes in Textile Research 3(7): 346-363, illus. May 1933; also in American Dyestuff Reporter 22(7): 217-225. Mar. 27, 1933.

Yarns without twist. Textile Manfr. 59(699): 90. Mar. 1933. (Published by Emmott and Co., Ltd., 31, King St. West, Manchester, England)

The process invented by W.R. Allen of Radcliffe, England. "A yarn of the usual short cotton fibres is obtained by spinning without inserting twist."

#### Technology of Manufacture

Hand, W.H. Peroxide bleach on cotton and cotton-rayon hosiery. Textile World 83(5): 740-741, illus. Apr. 1933. (Published at 330 West 42nd St., New York, N.Y.)

Philip, R. W. Report of Atlanta discussion on carding and spinning. Cotton 97(4): 19-26, Apr. 1933. (Published by W.R.C. Smith Publishing Co., Atlanta, Ga.)

Detailed report of meeting of Textile Operating Executives of Georgia, held at Atlanta, Mar. 17, 1933.

Variable-speed spinning among numerous topics discussed by Georgia executives. Textile World 83(5): 748-749. Apr. 1933. (Published at 330 West 42d St., New York, N.Y.)

Report of discussions at spring meeting of the textile Operating Executives of Georgia, held at Atlanta, Ga., Mar. 17, 1933.

Yarn twist and its influence in cloth manufacturing. Cotton 97(4): 34-35, illus. Apr. 1933. (Published by W.R.C. Smith Publishing Co., Atlanta, Ga.)

#### Technology of Consumption

Barr, D.M. Fashion is picking cotton. Carolinas Mag. 1(4): 25-26, illus. Mar. 1933. (Published at 324 South Church St., Charlotte, N.C.)

Cotton as used by fashion stylists.

Benton, M.C., comp. Uses for cotton. Selected references in the English language. Compiled...under the direction of Emily L. Day...Division of cotton marketing branch library. U.S. Dept. Agr., Bur. Agr. Econ., Agr. Econ. Bibliog. 44, 43 p., mimeogr. Washington, D.C. 1932.

"No attempt has been made to include references to uses for cotton seed and cottonseed products, although several such uses appear in connection with other references. With a few exceptions the period

covered is 1910 to November, 1932 inclusive."

Busby, H.S. Opportunities in ornament and texture. Cotton Trade Jour. 13(14): 2. Apr. 8, 1933. (Published at New Orleans, La.)

Possibilities in design in rough-textured cottons.

Kehren. Fabrikation und gummierung von regenmantelstoffen. Melland Textilberichte 13(10): 533-535. Oct. 1932. (Published at Heidelberg, Germany)

To be continued.

"The method of waterproofing with rubber is briefly described and the factors affecting the durability of the product are discussed. Fabrics that are to be treated with rubber should be free from acid, fat, copper, and manganese; analytical data are given for typical fabrics...Methods of determining the copper and manganese contents of yarns and fabrics are described and results of copper determinations on cotton, woollen, silk, and rayon goods dyed with various dyes are given." -Jour. Textile Inst. 24(3): A156. Mar. 1933.

Modern filter cloths. Types of fabrics for various applications. Textile Weekly 11(265): 123. Mar. 31, 1933. (Published at 49 Deansgate, Manchester, England)

"For ordinary filtering work, three common weaves of cotton cloth are generally preferred, namely, plain canvas with single or double thread, twill, and sateen."

Stuart, B.T. Things are not what they seem. Vogue 81(7): 44, 86. Apr. 1, 1933. (Published at Greenwich, Conn.)

Describes new products made from chemically-treated cotton. Among these are pyralin objects, duco, galalith (made of compressed milk and cotton), and fabrikoid.

Tranter, K.V. The wearer's point of view. Garments of Egyptian cotton. Manchester Guardian Com. (Egypt no.): 31. Mar. 25, 1933. (Published at the Guardian Bldg., Manchester, England)

Advantages of cotton as material for women's clothing; durability, permeability to ultra-violet rays, delicate texture, are mentioned.

#### SEED AND SEED PRODUCTS

[American oil chemists society] Report of seed analysis committee. Oil and Soap 10(1): 9-11. Jan. 1933. (Published by Gillette Publishing Co., 400 West Madison St., Chicago, Ill.)

C.H.Cox, Chairman.

Tests with Maclellan mixer and Meloy sampler proved that the latter is preferable for mixing cottonseed samples for free fatty acid determinations. Table lists results obtained with each.

Blizzard, W.L. Cottonseed products for fattening calves. Amer.Soc.Anim.Proc.25: 101. 1932. [n.p.] 1933.

Cottonseed meal is excellent fertilizer. Feedstuffs 5(14): 7. Apr.8,1933. (Published at 118 South Sixth St., Minneapolis, Minn.)

Endorsement of cottonseed cake as the protein supplement for range cattle feeding. Cotton and Cotton Oil News 34(15): 12. Apr.15,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Excerpts from article by C.W.McCampbell, "Fattening cattle for market in the range country", which appeared in "Western Farm Life" for March [1933]

"Dr. McCampbell gives no choice of protein supplements for the range feeder. He deals only with cottonseed cake or meal in his discussion."

Fehr, Frank, and company. Review of the oilseed, oil and oil cake markets for 1932. 72 p., tables. London, Frank Fehr and company, 1933.

Cottonseed and cottonseed oil: p.59-60. Annual review of industry in United States, Egypt, India.

Tables: p.58-59. Statistics for oil prices and exports.

Uses for cottonseed products extended. Cotton and Cotton Oil News 34(14): 12. Apr.8,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Cottonseed meal is used for feeding fish, in hatcheries; pigs and cows; and cottonseed cake is added to wet beet pulp ration for cattle.

#### LEGISLATION, REGULATION, AND ADJUDICATION

Canadian order rejects certain classes second-hand bag and bagging. Cotton and Cotton Oil News 34(15): 9. Apr.15,1933. (Published at 3116-18 Commerce St., Dallas, Tex.)

Dominion of Canada Ministerial Order No.48A.

Includes also reprint of resolution of Oklahoma and Arkansas Cotton Association condemning use of second-hand bagging for cotton covering.

Garrow, J.W. Cotton shippers' position. Cotton Digest 5(21): 5-6. Apr.8,1933. (Published at Houston, Tex.)

"Statement in behalf of the American Cotton Shippers Association before Senate Committee on Agriculture and Forestry upon the Emergency Agricultural Adjustment Act

Oleomargarine legislation of vital interest to cotton oil mills as well as to all domestic fat and oil producers.  
Cotton and Cotton Oil News 34(17): 12. Apr. 29, 1933.  
(Published at 3116-18 Commerce St., Dallas, Tex.)

Items regarding oleomargarine tax bills in Colorado and Illinois.

U.S. Tariff commission. Cotton velveteens and velvets. With proclamation of the President on cotton velvets and letter regarding cotton velveteens. Report...to the President...under the provisions of section 336 of the Tariff act of 1930. 43 p., tables, mimeogr. Washington, D.C., November 30, 1932.

Report of investigation of the cost of production of cotton velvets and velveteens in the United States and principal competing countries. The effect on these costs of the tariff on long staple cotton is considered.

#### MISCELLANEOUS--GENERAL

Association of southern agricultural workers. Proceedings of 33rd annual convention...1932. 132 p. [Birmingham, Ala, 1932]

"Held in Birmingham, Ala., February 2-4, 1932."

Brief abstracts are included of the following papers: The world situation with regard to cotton, by C. A. Cobb, p.6.-Co-operative marketing for miscellaneous southern crops, by Carl Williams, p.20.-Co-operative fertilizer placement tests with cotton in seven states, 1931, by G.A.Cumings and W. H. Sachs, p.27.-Response of certain soil types to various rates of application of calcium arsenate, by W.R.Paden, p.29. (S.C.Agr.Expt.Sta.Tech.Contrib.(New ser.)20).-Response of some common field crops to various rates of application of calcium arsenate to several soil types, by W.B.Rogers, p.30.-Fertilizer placement experiments with cotton at the Georgia experiment station, by G.A.Hale, p.31.-Methods of reducing cotton acreage, by G.W.Forster, p.32.-The effect of fertilizers and rainfall on the length of cotton fibers, by E.B.Reynolds and D.T.Killough, p.36.-Limestone in mixed fertilizers for cotton, by R.P.Bledsoe, p.36.-Relation of fertilization and selling price to profitability in cotton production, by C.B.Williams, p.38.-Some factors affecting the length of lint of cotton, by D.G.Sturkie, p.40.-Farm prices of cotton in relation to its grade and staple length in local markets in the United States--seasons of 1928-29, 1929-30, 1930-31, by L.D. Howell, p.64.-Reorganization of the local cotton markets, by W.T.Fullilove, p.65.-Experimental tests comparing the quality of machine-snapped versus hand-picked cotton, by D.W.Teare, p.71.-Some results of feeding cottonseed meal to dairy cows, by O.C.Copeland, p.83.-

Papers read at the Birmingham meeting of the Cotton states branch of the American association of economic entomologists: p.86-90.-A new chapter in the history of cotton, by Louise Huston, p.103 (manufacture of bemberg from cotton linters).

Bush, T.F. Address. Cotton Digest 5(24): 6-8, 19-20. Apr.29,1933. (Published at Houston, Tex.)

Address of president of American Cotton Shippers Association at convention in New Orleans, Apr.28-29, 1933.

Reviews history of the Association and discusses present policies.

Also in Cotton Trade Jour.13(17): 1,2,3,4. Apr.29, 1933.

Committee D-13 meeting. Amer.Wool and Cotton Rptr.47 (15): 22-23. Apr.13,1933. (Published at 530 Atlantic Ave., Boston, Mass.)

Short note of meeting of Committee D-13 of the American Society for Testing Materials in New York, N.Y., Apr.6-7,1933.

A cotton parity slide rule. Textile Weekly 11 (267): 169, illus. Apr.14,1933. (Published at 49,Deansgate, Manchester, England)

Describes use of and illustrates "a handy little slide rule which solves the equation necessary to calculate the Liverpool/New York straddle without including the carrying charges."

Derevitzky, N.F. The investigation of the accuracy of comparing means in the experiment with a scattered situation of replications. Bul.Appl.Bot.,Genet.and Plant-Breed.(ser.2) 3: 137-187. 1932. (Published at Leningrad, U.S.S.R.)

In Russian. English summary: p.171-187; also table legends in English.

Cotton yields; p.154, 179.

Heim de Balsac, F. Le Conservatoire national des arts et métiers et les études d'agronomie coloniale. Travaux de la Chaire d'agriculture et productions agricoles [publié par le professeur F.Heim de Balsac et ses collaborateurs] 54 p. [Paris] Exposition coloniale internationale, 1931.

Bibliography or afticles by the author and his coworkers on Colonial (French) products and their culture.

Cotons (cottons): 34-37.

Jordan, Harvie. Rehabilitating southern agriculture and the industry of growing cotton. Practical method suggestions prepared on request of President Franklin

D.Roosevelt for his study. South.Cultivator 91(4): 2,5. Apr.1,1933. (Published by Constitution Publishing Co., Box 1731, Altanta, Ga.)

Among the author's recommendations are the following: practical methods of soil rebuilding; diversification of food and feed crops; acreage reduction; one-variety communities; use of high-density gin compression; farmers' local organizations; bonded local warehouses; and federal farm-loan banks.

Nelson, Thomas. Development of the textile industry and textile education in North Carolina. Carolinas Mag. 1(4): 22-24, illus. Mar.1933. (Published at 324 South Church St., Charlotte, N.C.)

Oklahoma. Agricultural experiment station. Solving Oklahoma farm problems. Report of C.P.Blackwell, director...for July 1,1930, to June 30,1932. Prepared from department and branch station reports. 397p., illus. Stillwater [1932?]

Projects on the following subjects are reported: Soil and crop management methods for reducing soil and water losses: p.11-13.-Methods of fertilization of cotton, by H.J.Harper: p.16.-Variety tests, by L.L.Ligon and Hi W.Staten: p.40-47.-Date and method of planting, by L.L.Ligon and Hi W.Staten: p.47-50.-Testing quality in cotton, by Hi W.Staten and L.L. Ligon: p.50-54.-Effect of size of seed on cotton production, by Hi W.Staten and L.L.Ligon: p.55.-Cottonseed meal as feed for animals: p.69-71, 84-87, 112-115, 152-163.-Cottonseed studies, by W.D.Gallup: p.178-181.-Sales of cotton in the seed increasing, by L.S.Ellis, C.C.McWhorter, and A.M.Dickson: p.207-209.-Grade and staple length of cotton produced in Oklahoma, by C.C.McWhorter: p.213-216.-Boll weevil control investigations, by Ephriam Hixson: p.256-257.-Bacterial leaf spot of cotton, by F.M.Rolfs: p.280-283.

U.S. Bureau of standards (Dept. of commerce) Standards yearbook 1933. U.S.Dept.Com.,Bur.Standards Misc.Pub. 139, 255 p., tables. Washington, D.C. 1933.

Bibliography on standardization [compiled by Anne L.Baden]: p.231-244.

For references to cotton and cottonseed products see the index.

Vance,R.B. Human geography of the South. A study in regional resources and human adequacy. 596 p., illus. Chapel Hill, N.C., University of North Carolina press, 1932. (Univ. of N.C.Soc.Study Ser.)

Bibliography: p.512-579.

"With many a side glance at the historical development, this volume attempts to give a synthetic treat-

ment of the interaction of men and nature in the American South."—Preface.

Chap.V.The southern soil: p.77-108.—Chap.VIII.The cotton economy: p.177-204.—Chap.XI.The Delta: plantation heritage: p.261-274.—Chap.XII.The Piedmont crescent of industry: p.275-315. Textiles: p.289-298.—Chap.XIII.The South meets the West: p.316-350. From cattle to cotton: p.325-332.

- - - 0 - - -